

The 2005 Water Quality Report

Drinking Water Quality

Since 1990, California water utilities have been providing an annual Water Quality Report to their customers. This year's report covers calendar year 2004 water quality testing and has been prepared in compliance with new regulations called for in the 1996 reauthorization of the Safe Drinking Water Act. The reauthorization charged the United States Environmental Protection Agency (USEPA) with updating and strengthening the tap water regulatory program and changed the report's due date to July 1.

USEPA and the California Department of Health Services (CDHS) are the agencies responsible for establishing drinking water quality standards. To ensure that your tap water is safe to drink, the USEPA and CDHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. The federal Food and Drug Administration (FDA) also sets regulations for bottled water.

The Trabuco Canyon Water District (TCWD) has many procedures in place to safeguard its water supply. The water delivered to your home meets the standards required by the state and federal regulatory agencies. In some cases, TCWD goes beyond what is required to monitor for additional contaminants that have known health risks.

Unregulated contaminant monitoring helps USEPA determine where certain contaminants occur and whether it needs to establish regulations for those contaminants.

If you have any questions about your water, please contact us for answers...

For information about this report, or your water quality in general, please contact Neil McKenna at (949) 858-0277. The Water District Board of Directors meets the third Wednesday of each month at 7:00 p.m. at the District's Administration Building located at 32003 Dove Canyon Drive, Trabuco Canyon, California 92679. The public is encouraged to attend.

For more information about the health effects of the listed contaminants in the following tables, call the U.S. Environmental Protection Agency hotline at (800) 426-4791.

The Trabuco Canyon Water District encourages its customers to visit our website at www.tcwd.ca.gov.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

يحتوي هذا التقرير على معلومات هامة عن نوعية مياه الشرب في منطقتك. يرجى ترجمته أو ابحث التقرير مع صديق لك يفهم هذه المعلومات جيداً.

Arabic

Der Bericht enthält wichtige Informationen über die Wasserqualität in Ihrer Umgebung. Der Bericht sollte entweder offiziell übersetzt werden, oder sprechen Sie mit Freunden oder Bekannten, die gute Englischkenntnisse besitzen

German

इस रिपोर्ट में पीने के पानी के विषय पर बहुत जरूरी जानकारी दी गई है। कृपया इसका अनुवाद कीजिए, या किसी जानकारी से इस बारे में पूछिये।

Hindi

이 보고서는 귀하기 거주하는 지역의 수질에 관한 중요한 정보가 들어 있습니다. 이것을 번역하거나 충분히 이해하시는 친구와 상의하십시오.

Korean

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

Spanish

Cé rapport contient de information importante concernant votre eau potable. Veuillez traduire, ou parlez avec quelqu'un qui peut le comprendre.

French

この資料には、あなたの飲料水についての大切な情報がかかれています。内容をよく理解するために、日本語に翻訳して読むか説明を受けてください。

Japanese

Bản báo cáo có ghi những chỉ tiết quan trọng về phẩm chất nước trong cộng đồng quý vị. Hãy nhờ người thông dịch hoặc hỏi một người bạn biết rõ về văn đề này.

Vietnamese



Trabuco Canyon
Water District

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Trabuco Canyon
Water District
2005
Water Quality Report

What You Need to Know About Your Water, and How it May Affect You

Sources of Supply

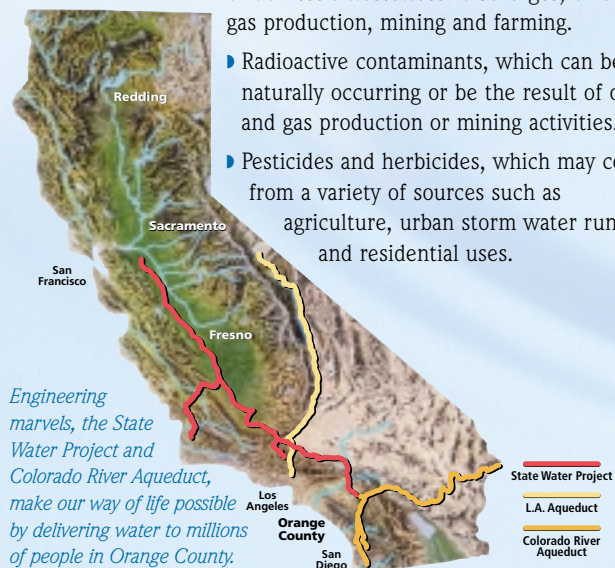
Your drinking water is mostly surface water imported by Metropolitan's imported water source which is Colorado River water and water from the State Water Project from Northern California. In some portions of the District, your drinking water is a blend of mostly groundwater from the Orange County groundwater basin blended with Metropolitan's imported water. This groundwater comes from a natural underground reservoir, managed by the Orange County Water District, stretching from Prado Dam and fanning across the northwest portion of Orange County, and stretching as far south as the El Toro "Y." Local groundwater comes from District operated wells known as the Rose Canyon and Lang Wells.

Basic Information About Drinking Water Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the layers of the ground it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal and human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production or mining activities.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.



- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban storm water runoff and septic systems.

In order to ensure that tap water is safe to drink, USEPA and the CDHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDHS regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

Cryptosporidium

Cryptosporidium is a microscopic organism that, when ingested, can cause diarrhea, fever, and other gastrointestinal symptoms. The organism comes from animal and/or human wastes and may be in surface water. The Metropolitan Water District of Southern California, which did not detect it in the water, tested your surface water for *Cryptosporidium* in 2004. If it ever is detected, *Cryptosporidium* is eliminated by an effective treatment combination including sedimentation, filtration and disinfection.

The USEPA and the federal Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from USEPA's safe drinking water hotline at (800) 426-4791 between 9 a.m. and 5 p.m. Eastern Time (6 a.m. to 2 p.m. in California).

Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those with cancer who are undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

Arsenic

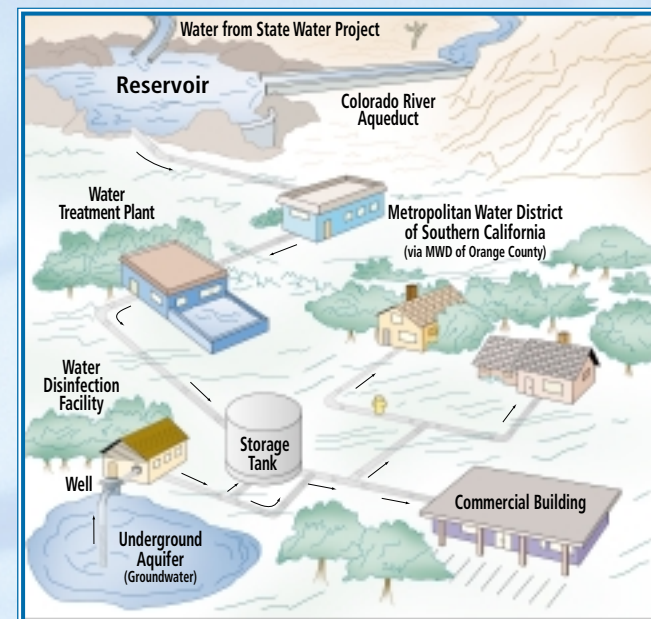
The maximum allowable level of arsenic in drinking water, also called the maximum contaminant level or MCL, is 50 parts per billion



(1 ppb = 1 microgram per liter). The USEPA recently reduced the arsenic MCL to 10 ppb. All water systems must comply with this new standard by 2006. The CDHS is in the process of reviewing the arsenic MCL and may propose a revised MCL below 10 ppb sometime in 2005. The following advisory is issued because in 2004 we recorded an arsenic measurement in the drinking water supply between 5 and 10 ppb.

Although the level of arsenic in your tap water is below the current MCL and would also comply with the new federal standard, it may be within the range of MCL options being considered by the State of California.

While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The CDHS continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.



Imported water — from the Colorado River and northern California — travels hundreds of miles, across deserts and mountains, to meet the needs of Orange County. Water is also pumped from local groundwater basins below ground, then treated and sent to homes and businesses.

The Continuing Quality of Your Water is Our Primary Concern

Contaminants Not Detected

The Trabuco Canyon Water District (TCWD) safeguards its water supply and, as in years past, the water delivered to your home meets the standards required by the state and federal regulatory agencies. In some cases, TCWD goes beyond what is required to monitor for additional contaminants that have known health risks. The contaminants listed below, specifically including Chromium and MTBE, were NOT DETECTED in TCWD'S water during 2004.

1,1,1-Trichloroethane	Beryllium	Methylene chloride
1,1,2,2-Tetrachloroethane	Bromobenzene	n-Butylbenzene
1,1,2-Trichloroethane	Bromochloromethane	Naphthalene
1,1-Dichloroethane	Bromomethane	Nickel
1,1-Dichloroethene	Cadmium	Nitrogen Phosphorous Pesticides
1,2,3-Trichlorobenzene	Carbon Tetrachloride	Selenium
1,2,3-Trichloropropane	Chlorobenzene	Simazine
1,2,4-Trichlorobenzene	Chloroethane	Styrene
1,2,4-Trimethylbenzene	Chloromethane	Tetrachloroethene
1,2-Dichlorobenzene	Chromium	Thallium
1,2-Dichloroethane	cis-1,2-Dichloroethene	Thiobencarb
1,2-Dichloropropane	cis-1,3-Dichloropropene	Toulene
1,3,5-Trimethylbenzene	Cyanide	Total Coliform Bacteria
1,3-Dichlorobenzene	Diazinon	trans-1,2-Dichloroethene
1,3-Dichloropropane	Dibromomethane	trans-1,3-Dichloropropene
1,4-Dichlorobenzene	Dimethoate	Trichloroethene
1-Phenylpropane	Dichlorofluoromethane	Trichlorofluoromethane
2,2-Dichloropropane	Ethyl benzene	Trichlorotrifluoroethane
2-Chlorotoluene	Fecal Coliform and E.Coli	Vinyl Chloride
4-Chlorotoluene	Isopropylbenzene	Xylenes
Atrazine	Mercury	
Benzene	Methyl-t-butyl ether	

Source Water Assessments

Import (Metropolitan) Water Assessment

In December 2002, Metropolitan Water District of Southern California completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting Metropolitan by phone at (213) 217-6850.

Groundwater Assessment

An assessment of the drinking water sources for Trabuco Canyon Water District was completed in November 2002. The water sources are considered most vulnerable to contaminants associated with historic gas stations, septic systems, agricultural/irrigation wells, above and below ground storage tanks and mining activities. There have been no contaminants detected in TCWD'S water associated with these activities. The only detections of contaminants are associated with naturally occuring salts, naturally occuring radiochemicals, and low level organics. A copy of the complete assessment is available at Trabuco Canyon Water District. You may request that a summary of the assessment be sent to you by contacting Neil McKenna at (949) 858-0277.

Want Additional Information?

There's a wealth of information on the internet about Drinking Water Quality and water issues in general. Some good sites — both local and national — to begin your own investigation are:

- Trabuco Canyon Water District
www.tcwd.ca.gov
- Municipal Water District of Orange County
www.mwdoc.com
- Orange County Water District
www.ocwd.com
- Metropolitan Water District of Southern California
www.mwdh20.com
- California Department of Health Services, Division of Drinking Water and Environmental Management
www.dhs.cahwnet.gov/ps/ddwem
- U.S. Environmental Protection Agency
www.epa.gov/safewater/

Table Definitions

- AL (Action Level):** The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.
- MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (2nd MCL) are set to protect the odor, taste, and appearance of drinking water.
- MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.
- PHG (Public Health Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
- Primary Drinking Water Standard or PDWS:** MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.
- Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Variance:** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- n/a:** Not applicable.
- NS:** No standard established.
- NTU (nephelometric turbidity units):** Measurement of the clarity, or turbidity, of water.
- pCi/L (picocuries per liter):** A measure of the natural rate of radioactive disintegration.
- micromhos/cm (micromhos per centimeter):** A measure of electrical conductance.
- Measurements:** Water is sampled and tested throughout the year. Contaminants are measured in parts per million (ppm), parts per billion (ppb), parts per trillion (ppt), and even parts per quadrillion (ppq). If this is difficult to imagine, think about these comparisons:
- | | |
|----------------------------------|----------------------------------|
| Parts per million (mg/L): | Parts per billion (µg/L): |
| • 1 second in 12 days | • 1 second in 32 years |
| • 1 penny in \$10,000 | • 1 penny in \$10 million |
| • 1 inch in 16 miles | • 1 inch in 16,000 miles |
- It is important to note, however, that even a small concentration of certain contaminants can adversely affect a water supply.*

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

2004 Trabuco Canyon Water District Groundwater Quality							
Chemical	MCL	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source of Contaminant
Radiologicals							
Uranium (pCi/L)	20	0.5	<2	ND – 4.0	No	2004	Erosion of natural deposits
Inorganic Chemicals							
Aluminum (ppm)	1/ 0.2*	0.6	0.1	ND – 0.3	No	2004	Erosion of Natural Deposits
Antimony (ppb)	6	20	6.0	ND – 17	No	2004	Erosion of Natural Deposits
Arsenic (ppb)	50	0.004	3.0	ND – 8.0	No	2004	Erosion of Natural Deposits
Barium (ppm)	1	2	<0.1	ND – 0.11	No	2004	Erosion of Natural Deposits
Fluoride (ppm)	2	1	0.11	0.05 – 0.15	No	2004	Erosion of Natural Deposits
Nitrate (ppm as Nitrate)	45	45	3.8	1.2 – 6.9	No	2004	Fertilizers, Septic Tanks
Nitrate + Nitrite (ppm as N)	10	10	0.8	0.3 – 1.5	No	2004	Fertilizers, Septic Tanks
Secondary Standards*							
Chloride (ppm)	500*	n/a	19	19	No	2003	Erosion of Natural Deposits
Specific Conductance (µmho/cm)	1,600*	n/a	780	780	No	2003	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	198	198	No	2003	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	540	540	No	2003	Erosion of Natural Deposits
Turbidity (ntu)	5*	n/a	0.37	0.37	No	2004	Erosion of Natural Deposits
Unregulated Contaminants Requiring Monitoring							
Bicarbonate (ppm as CaCO ₃)	Not Regulated	n/a	152	ND – 262	n/a	2004	Erosion of natural deposits
Boron (ppm)	Not Regulated	n/a	<0.1	ND – 0.14	n/a	2004	Erosion of natural deposits
Calcium (ppm)	Not Regulated	n/a	53	1.0 – 86	n/a	2004	Erosion of natural deposits
Magnesium (ppm)	Not Regulated	n/a	25	19 – 30	n/a	2004	Erosion of natural deposits
Potassium (ppm)	Not Regulated	n/a	1.8	1.8	n/a	2004	Erosion of natural deposits
pH (units)	Not Regulated	n/a	7.3	7.1 – 7.8	n/a	2004	Erosion of natural deposits
Sodium (ppm)	Not Regulated	n/a	53	29 – 104	n/a	2004	Erosion of natural deposits
Total Alkalinity (ppm as CaCO ₃)	Not Regulated	n/a	209	171 – 262	n/a	2004	Erosion of natural deposits
Total Hardness (ppm as CaCO ₃)	Not Regulated	n/a	320	292 – 362	n/a	2004	Erosion of natural deposits
Vanadium (ppb)	Not Regulated	n/a	16	ND – 30	n/a	2004	Erosion of natural deposits

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; ND = not detected; n/a = not applicable; < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal µmho/cm = micromho per centimeter; * Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Trabuco Canyon Water District Dimension Water Treatment Plant

Chemical	MCL	PHG, or (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling Date	Typical Source of Contaminant
Radiologicals							
Alpha Radiation (pCi/L)	15	n/a	6.2	3.2 – 9.5	No	2004	Erosion of natural deposits
Uranium (pCi/L)	20	0.5	3.0	ND – 7.0	No	2004	Erosion of natural deposits
Inorganic Chemicals							
Aluminum (ppm)	1 / 0.2*	0.6	0.24	0.18 – 0.36	No	2004	Water treatment chemical
Barium (ppm)	1	2	0.12	0.11 – 0.12	No	2004	Erosion of natural deposits
Fluoride (ppm)	2	1	0.31	0.27 – 0.37	No	2004	Erosion of natural deposits
Nitrate (ppm as N)	10	10	<0.4	ND – 0.6	No	2004	Fertilizers, Septic Tanks
Nitrite (ppm as N)	10	10	0.4	0.4	No	2003	Fertilizers, Septic Tanks
Nitrate + Nitrite (ppm as N)	10	10	<0.4	ND – 0.6	No	2004	Fertilizers, Septic Tanks
Secondary Standards*							
Chloride (ppm)	500*	n/a	81	81	No	2003	Erosion of natural deposits
Color (color units)	15*	n/a	1	1	No	2003	Erosion of natural deposits
Odor (threshold odor number)	3*	n/a	1	1	No	2003	Erosion of natural deposits
Specific Conductance (µmho/cm)	1,600*	n/a	960	960	No	2003	Erosion of natural deposits
Sulfate (ppm)	500*	n/a	2.5	2.5	No	2003	Erosion of natural deposits
Total Dissolved Solids (ppm)	1,000*	n/a	650	650	No	2003	Erosion of natural deposits
Unregulated Contaminants Requiring Monitoring							
Calcium (ppm)	Not Regulated	n/a	76	76	n/a	2003	Erosion of natural deposits
Magnesium (ppm)	Not Regulated	n/a	32	32	n/a	2003	Erosion of natural deposits
Potassium (ppm)	Not Regulated	n/a	4.9	4.9	n/a	2003	Erosion of natural deposits
pH (units)	Not Regulated	n/a	7.6	7.6	n/a	2003	Erosion of natural deposits
Sodium (ppm)	Not Regulated	n/a	93	93	n/a	2003	Erosion of natural deposits
Total Alkalinity (ppm)	Not Regulated	n/a	138	138	n/a	2003	Erosion of natural deposits
Total Hardness (ppm as CaCO3)	Not Regulated	n/a	320	320	n/a	2003	Erosion of natural deposits

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; ND = not detected; n/a = not applicable; < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; *Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Turbidity – combined filter effluent	Treatment Technique	Turbidity Measurement	TT Violation?	Most Recent Sampling Date	Typical Source of Contaminant
1) Highest single turbidity measurement	0.3 NTU	0.16	No	2004	Soil run-off
2) Percentage of samples less than 0.5 NTU	95%	100%	No	2004	Soil run-off

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Trabuco Canyon Water District's treated water is a good indicator of effective filtration. Filtration is called a treatment technique. A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.

Trabuco Canyon Water District Distribution System Water Quality

	MCL (MRDL/MRDLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Total Trihalomethanes (ppb)	80	45	4.6 – 69	No	Byproducts of chlorine disinfection
Haloacetic Acids (ppb)	60	21	2.4 – 43	No	Byproducts of chlorine disinfection
Chlorine Residual (ppm)	(4 / 4)	0.8	ND – 2.0	No	Disinfectant added for treatment
Turbidity (ntu)	5*	0.19	ND – 0.57	No	Erosion of natural deposits

Twelve locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; twelve locations are tested monthly for color, odor and turbidity. Color and odor were not detected in any distribution system samples in 2004. MRDL = Maximum Residual Disinfectant Level; ND = not detected; MRDLG = Maximum Residual Disinfectant Level Goal; ntu = nephelometric turbidity units; * Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

Lead and Copper Action Levels at Residential Taps

	Action Level (AL)	Health Goal	90th Percentile Value	Sites Exceeding AL / Number of Sites	AL Violation?	Typical Source of Contaminant
Lead (ppb)	15	2	ND<5	0 / 35	No	Corrosion of household plumbing
Copper (ppm)	1.3	0.17	0.11	0 / 35	No	Corrosion of household plumbing

Every three years, at least 30 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2003. Lead was detected in one home, but did not exceed the action level. Copper was detected in 31 samples, but none exceeded the action level. The regulatory action level is the concentration which, if exceeded in more than ten percent of the homes tested, triggers treatment or other requirements which a water system must follow. Trabuco Canyon Water District complied with the lead and copper action levels.

2004 Metropolitan Water District of Southern California Treated Surface Water

Chemical	MCL	PHG, or (MCLG)	Average Amount	Range of Detections	MCL Violation?	Typical Source of Contaminant
Radiologicals – Tested in 2003						
Beta Radiation (pCi/L)	50	n/a	4.1	ND – 5.9	No	Decay of man-made or natural deposits
Uranium (pCi/L)	20	0.5	<2	ND – 2.6	No	Erosion of natural deposits
Inorganic Chemicals – Tested in 2004						
Fluoride (ppm)	2	1	0.18	0.14 – 0.20	No	Erosion of natural deposits
Nitrate and Nitrite as N (ppm)	10	10	0.5	ND – 0.8	No	Agriculture runoff and sewage
Nitrate as N (ppm)	10	10	0.5	ND – 0.8	No	Agriculture runoff and sewage
Secondary Standards* – Tested in 2004						
Chloride (ppm)	500*	n/a	87	76 – 110	No	Runoff or leaching from natural deposits
Color (color units)	15*	n/a	2	1 – 3	No	Runoff or leaching from natural deposits
Corrosivity (LSI)	non-corrosive	n/a	0.18	0.03 – 0.29	No	Elemental balance in water
Odor (odor units)	3*	n/a	1	1	No	Naturally occurring organic materials
Specific Conductance (µmho/cm)	1,600*	n/a	749	644 – 877	No	Substances that form ions in water
Sulfate (ppm)	500*	n/a	138	92 – 194	No	Runoff or leaching of natural deposits
Total Dissolved Solids (ppm)	1,000*	n/a	435	370 – 521	No	Runoff or leaching of natural deposits
Turbidity (NTU)	5*	n/a	0.05	0.04 – 0.08	No	Runoff or leaching of natural deposits
Unregulated Chemicals - Tested in 2004						
Alkalinity (ppm)	Not Regulated	n/a	89	76 – 98	n/a	Runoff or leaching from natural deposits
Boron (ppb)	Not Regulated	n/a	130	130 – 140	n/a	Runoff or leaching from natural deposits
Calcium (ppm)	Not Regulated	n/a	40	31 – 48	n/a	Runoff or leaching from natural deposits
Hardness, total (ppm)	Not Regulated	n/a	179	139 – 210	n/a	Runoff or leaching of natural deposits
Hardness, total (grains/gal)	Not Regulated	n/a	10	8.1 – 12	n/a	Runoff or leaching of natural deposits
Magnesium (ppm)	Not Regulated	n/a	19	15 – 22	n/a	Runoff or leaching from natural deposits
pH (pH units)	Not Regulated	n/a	8.2	8.1 – 8.2	n/a	Hydrogen ion concentration
Potassium (ppm)	Not Regulated	n/a	3.5	3.0 – 4.0	n/a	Runoff or leaching from natural deposits
Sodium (ppm)	Not Regulated	n/a	80	74 – 94	n/a	Runoff or leaching from natural deposits

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; ntu = nephelometric turbidity units; µmho/cm = micromhos per centimeter; ND = not detected; < = average is less than the detection limit for reporting purposes; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; n/a = not applicable; LSI = Langelier Saturation Index; *Contaminant is regulated by a secondary standard.

Turbidity - combined filter effluent	Treatment Technique	Turbidity Measurements	TT Violation?	Typical Source of Contaminant
1) Highest single turbidity measurement	0.3 NTU	0.1	No	Soil run-off
2) Percentage of samples less than 0.3 NTU	95%	100%	No	Soil run-off

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a treatment technique. A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.